

BIOMEDICAL ENGINEERING

BME

College of Engineering

425 Biomaterials and Biocompatibility
 Spring, 3(3-0) Interdepartmental with Materials Science and Engineering. Administered by Materials Science and Engineering. P: MSE 250 RB: PSL 250 R: Open to juniors or seniors in the College of Engineering. SA: BME 424, MSE 324

Materials science of human implants. Design requirements imposed by the human body, and need for bodily protection.

490 Independent Study
 Fall, Spring, 3 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of department.

Individualized reading and research in biomedical engineering or bioengineering.

490A Independent Study in Clinical Biomechanics
 Fall, 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of department.

Individualized reading and research in the application of biomechanics to clinical cases.

490B Independent Study in Biomaterials
 Spring, 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of department.

Individualized reading and research in the application of biomaterials.

491 Special Topics
 Fall, Spring, 3 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course.

Special topics in biomedical engineering or bioengineering.

495 Tissue Mechanics
 Spring, 3(3-0) Interdepartmental with Mechanical Engineering. Administered by Mechanical Engineering. P: (ME 222) R: Open to students in the College of Engineering. SA: MSM 441

Application of solid mechanics to understanding mechanical responses of biological tissues. Microstructure and biological function for soft and hard connective tissues and muscle.

497 Biomechanical Design in Product Development
 Spring, 3(3-0) Interdepartmental with Mechanical Engineering. Administered by Mechanical Engineering. P: ME 371 or concurrently R: Open to juniors or seniors in the Department of Mechanical Engineering. SA: BME 491A, MSM 445

Biomechanical product design with application to people or animals. Synthesis, prototyping, and analysis of designs. Project management. Market research.